

USABILITY AND ACCESSIBILITY EVALUATION OF THE DIGITAL DOORWAY

by

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ABSTRACT

The Digital Doorway (DD) is a non-standard computer system deployed to promote computer literacy amongst underprivileged communities in South Africa. Since its inception there has been no usability evaluation of the software installed on the DD. This study investigated the applicability of standard usability and accessibility evaluation methods to evaluate the software installed on the DD. It involved two cycles of design research phases to develop a set of multi-category heuristics for evaluating a selection of interfaces and applications installed on the DD. The heuristic evaluation method was found to be an appropriate method for evaluating the usability of the software as well as the direct accessibility support provided on the DD. As a triangulation exercise the heuristic evaluation was complemented with direct field observation and questionnaires. The study also confirmed the complementary role of using a combination of evaluation methods.

Keywords: Accessibility; design principles; digital divide; digital doorway; direct field observation; heuristics; heuristic evaluation; human-computer interaction; usability; usability evaluation methods.